No. XXV.—DIPTERA, PSYCHODIDÆ.

BY THE REV. A. E. EATON, M.A., F.E.S.

(COMMUNICATED BY PROF. J. STANLEY GARDINER, M.A., F.R.S., F.L.S.)

(Plate 26.)

Read 16th January, 1913.

OF this Family of the Diptera eight species were obtained in the Seychelles by Mr Hugh Scott, and a ninth on the distant island of Aldabra by Mr J. C. F. Fryer. Six of the nine are new and admit of description; two were published long ago; and the one remaining can only be placed in its genus at present. The nine species are:

Brunettia indica, sp. nov.

Panimerus scotti, gen. et sp. nov.

Notiocharis insignis, gen. et sp. nov.

Psychoda alternata, Say.

Psychoda solitaria, sp. nov.?

Philosepedon humeralis, Hoffmann. Philosepedon triungulatus, sp. nov. Telmatoscopus fryeri, sp. nov. Sycorax, sp.

So far as they are now known, the genera of the whole Family can be assorted into four principal Groups, by referring to the wings and antennæ. These Groups, not necessarily of the status of Sub-Families or Tribes, contain nearly related forms and distant kindred, like a chart depicting archipelagoes with solitary outliers. In the Seychelles two of these Groups only are represented. For reference a figure (Pl. 26, fig. 1) is given of a wing of a ? fly selected out of another Group, and lettered in accordance with Comstock and Needham's terminology of nervures.

This figure (Pl. 26, fig. 1) resembles the neuration of wings of all of the genera (except Sycorax) in the collection in one particular: the anterior basal cell is bounded in front by the main stem of the radial sectors, almost exclusively, so close to the wing-roots does R^{i} branch off from R^{i} . But the first six of the genera all (except Notiocharis) have wings apically pointed at the end of R^{i} ; and none of the eight (except Panimerus) has the Sectorial Fork pedicellate to the anterior basal cell.

Brunettia is an Indo-Malayan genus, nearly related to the European genus Pericoma Halid., Walk., Ins. Brit. Dipt. vol. iii. p. 256 (1856); as restricted by Eaton, Ent. M. Mag., ser. 2, vol. vii. p. 121 (June 1897).

Panimerus, represented by several species in Europe and North Africa, contains the Baltic Amber insect named Pericoma formosa by Meunier, Ann. Mus. Nat. Hungarici, iii. p. 243, pl. 7, figs. 1 and 2, antennæ 3 and 2 (1905).

Notiocharis may be endemic to the Seychelles.

Philosepedon and Psychoda seem to be fossil in Baltic Amber (cf. Meunier, op. cit., pl. 7, figs. 5 and 6) under the names Psychoda oxyptera Loew, and Psychoda eocenica Meun., respectively.

The Aldabran Telmatoscopus very likely frequents still or slowly moving waters.

No citation can be made of American *Psychodida*, because they have not yet been assorted.

The seventh genus (Sycorax) represented in the collection belongs to a different group, which is outlined on pp. 430—431.

Brunettia, Annandale. (Pl. 26, fig. 2 a-f and fig. 3 a-f.)

Brunettia Annandale, Records Ind. Mus. vol. v. part 3, pp. 141—144, pl. 12 (Sept. 1910).

Diplonema Annandale, Journ. Asiatic Soc. Bengal, vol. iv. p. 353 (1908) and Records Ind. Mus., vol. iv. p. 39 (1910); nec Loew (1845).

Distinguished from Pericoma, restrict., by the subsequent radial sectors branching at acute angles unilaterally from R^2 within approximately the basal $\frac{1}{3}$ of the wing's length; wing-markings of small white scale spots by the ends of most of the nervures; wing-membrane in β to a large extent densely squamate beneath with thin longitudinally striate scutiform or cuneate scales; joints of the antennal flagellum furnished each with a pair of long narrow flattened articular appendages tapering gradually to their points, laxly sub-spiral and widely arcuate, that reach to the base of the following joint; and by the inferior β genital appendages having indefinitely numerous capillaceous tenaculæ with expanded tips. Number of joints in the antennæ, and place of the apical extremity of the wing varying with the species. Type Brunettia superstes Annandale, and one other species described. Distribution: Indo-Malaysia and the Seychelles.

1. Brunettia indica, sp. nov. (Pl. 26, fig. 2 a-f and fig. 3 a-f.)

Antennæ 15-jointed in both sexes: 1st joint in \mathfrak{F} very little shorter than the next two combined; 2nd globular; 3rd subequal to the fourth, fusiform—urceolate in outline with slight gibbosity, followed by gibbous obclaviform or pernoid joints; 14th oval; 15th rounded, apiculate. Wings \mathfrak{F} ovate, acute; four veins strong, R^1 , R^2 , R^5 and Cu^2 ; the other radial sectors, the median and Cu^1 basewards attenuated and the vein A thin: R^4 branching from R^2 a little nearer to the fold of deflection than to the axil of the sectorial fork; the pedicel of this fork $\frac{1}{2}$ the length of the pedicel of the median fork, and $\frac{1}{5}$ th the length of R^3 . Post radial plica strong, widely gaping; anterior basal cell linear, ill-defined, almost filled up by the thickened base of R^2 and the spur of R^5 ; crossvein R to M faint: marginal area sphenoid with base oblique, and its costal border nearly straight, heavily fringed; beyond this the costal fringe is denser than that of the opposite margin, but shorter. Wing of a rich brownish black, with purple and greenish satiny gloss; some whitish bristling hair on the usual nervures in approximately the basal $\frac{1}{3}$ of the wing, and squamæ beneath on the membrane of the basal $\frac{1}{2}$. Nine small marginal spots, one at the end of every vein except Sc and A, formed of white linear scales laid

lengthwise, are probably a generical feature; on each margin the two nearest to the base are slightly larger than the others. Legs brownish black with white markings:—a white gloss at the knee; a whitish gleam down the upper half of the tibia, and a white scalespot on the exposed side of its tip; also a narrow oblique annulation, broadened on one side in the hind foot, at the apex of the 1st joint in the tarsus. The tibial bristles take a white gloss. Indumentum of the head and thorax in \(\partial \) generally concolorous with the predominant tint of the wings; in 3, parts take a white gloss, e.g. the sepia-black-brown palpi, the frontal scales and scales on the inner side of the basal joints of the antennæ; indumentum of the pronotum and in front of the wing-roots is also liable to a light gloss. Abdomen (in contrast with the scutellum and metanotum) smooth haired; the hairs long and silky, of the prevailing dark hue. Superior genital appendages in 3 similar (viewed broad-side) to the upper part of a bird's head: protopodite longer than broad, rounded externally; exopodite produced obliquely along the articulation, falcate or subulate with decurved tip garnished with two minute, erect, preapical setulæ; endopodite wanting, unless present in the guise of an upper penis-cover composed of two strong obliquepointed, acuminate spines, grooved longitudinally within, and extended laterally at the base, flanking a pair of short compressed subulate blades produced from the termination of the ductus ejaculatorius, subtended by a short, subacute, triangular lobe, (?) lower penis cover, that is not to be confounded with the obtusely sub-triangular terminal lobe projecting to the rear beyond the insertions of the inferior genital appendages.

Wings of \mathcal{P} ovate lanceolate: R^4 branching from R^2 midway between the axil of the sectorial fork and the fold of deflection; marginal area (subtended by R^4) narrower than the maximum breadth of the space between Cu^2 and the inner margin.

Loc. Seychelles. Mahé: Cascade Estate, about 800 feet, many examples, from windows of house, &c.; near Morne Blanc, about 800 feet. Silhouette: plateau of Mare aux Cochons, over 1000 feet, IX. 1908, 1 specimen. Also known from India; Matheran, W. Ghauts, Bombay, 800 m. (Biró, 8. VII. 1902: ex Mus. Nat. Hung., Budapest, by favour of Dr Kertesz). Prep., Eaton, no. 44, a—f.

Panimerus, gen. nov. (Pl. 26, fig. 4).

Wings obovate—lanceolate, acute at R^s , the costa arcuate in a less degree than the opposite margin, and the endings of veins posterior to the apex rather wider apart than those of the radius and its branches in most cases: anterior basal cell extended beyond the fold of deflection; pedicel of the sectorial fork weakly attached to this cell, usually at some point interior to the cross-vein R to M, seldom subopposite thereto in individual flies (cf. P. hirtus; Prep. Eaton, no. 47, d and k): sectorial fork longer than the median, and extending inwards deeper than the middle of the wing, except in the Algerian species P. nadorensis, sp. nov. (Prep. Eaton, no. 51 a) which has these forks of almost equal length, reaching to about the wing's middle; cubital fork sessile; cross-veins somewhat vague; R^s sometimes shortly prolonged into the basal cell. Wing-membrane nude; the nervures beneath, to a distance from the roots differing with the species, clad in \mathfrak{F} flies with narrow-linear or linear-lanceolate distichous scales narrowed basally to a short



stalk; bristling hair rather capillareous; in 2 as usual, the indumentum of the nervures is more hair-like throughout. Wing-markings chiefly dark hair-spots at the ends of nervures, not extended into the fringe; some dark hair, constituting either spots by the sectorial and median forks, or a transverse fascia thereabouts, skirted externally in most of the species with a narrow space of whitish-glossed outward spreading hair; also the ranks of bristling hair, whitish or opalescent, and in some instances a few additional dark hair-spots interspersed; fringes for some distance around the wing's apex light-glossed; dark elsewhere. Prothoracic air-tubes claviform, retained by the 3, deciduous in the aged. Antennæ 16-jointed; & 1st joint elongate claviform, subequal in length to the next three joints combined; 2nd joint densely squamate like the first, pyriform, or inversely triangular and truncate like the butt-end of a gun-stock, and ciliated along the outer edge with long acicular spinules contrasted in their light colour with the dark, obtuse scales, which spinules tend to be fasciculate distally; 3rd joint according to standpoint shortly fusiform-ovoid, fusiform-urceolate, or somewhat truncate-biconical, subequal in length to the fourth joint but with a shorter neck; 4th-14th joints lageniform with ovoid, not quite symmetrical bulbs, each with a small sensory pore on the more protuberant side above the zone of hair, and with a single pair of long setiform articular appendages (used perhaps for adjusting, from within, the whorl of hairs and for the alignment of joints) inserted close together beside the pore and reflected apart with a wide twisted curve towards the opposite side of the joint, slanting upwards; 15th joint either sub-globular, ovoid, or oblong, closely approximated to the apiculate bulbous 16th joint. In antennæ of ♀, long, dense, setaceous scales on one side of the 1st joint, that reach as far as the whorl of hairs of the 4th joint, serve as a check to the obovoid 2nd joint, which has no tuft of acicular spinules; 3rd joint asymmetrical, narrowly amphoroid or vase-shape with sloping shoulder and short neck, or fusiform urceolate. Protopodite in 3 superior genital appendages stout, rounded externally; exopodite expanded at the articulation, unciform or falcate; endopodite (?) a long, curved, subulate spine. Inferior appendages short, little longer than the segment: tenacular spinules numerous if distributed along the whole length of the forceps-limb, but if subapical fewer and of graded lengths, the longest shorter than the limb. Ovipositor rostrate: subgenital plate in 9 ending in a deep median sinus flanked by obtuse lobes.

Type Panimerus hirtus (Linn.) (notabilis Eaton), the only species previously described out of 4 Palearctic species and 1 species from the Seychelles, sub manû.

2. Panimerus scotti, sp. nov. \(\text{Pl. 26}, \text{ fig. 4.} \)

Wings dark ashen-grey with fringes of the same colour from the base to the end of R^1 on the costa, and to the hair-spot at the end of Cu^2 on the opposite margin; from thence to the apex with somewhat cupreous-, or dull gold-glossed fringes, "shot" with the aforesaid grey to a large extent; and on the disk with black hair-spots set off with white hairs, viz.:—(in addition to some ill-defined dark markings close to the wing-roots) a dark rounded spot in the depression near the cross-vein Sc to R^1 ; another at the end of this depression, between R^1 and the costa; 7 spots marking endings of ranks of bristling hair, set off with a few spreading white hairs externally (namely on the veins R^2 , R^3 , R^4 ,

 M^1 , at the median fork, opposite the spot on R^2 , Cu^1 and A); and at the margin of the disk 8 small spots of spreading hair at the ends of nervures preceded by some white hairs invaded by the coppery gloss of the fringe in the apical portion of the wing, amounting altogether to 9 blackish spots or tufts on the disk and 8 clear of the fringe along the margin or 17 in all: R^1 and R^5 lacking the terminal dark spots. Abdomen and under parts of head and thorax blackish; its dense suberect dorsal hair frosted with white at the tips of the hairs when turned about. Pubescence of the upper parts of head and thorax whitish, or greyish-white with white-tipped hairs, according to standpoint; frons and palpi, from in front, greyish-brown or blackish. Antennæ brown; scape with impure whitish-glossed, light brown scales; hair of flagellum whitish-warm sepia grey, shifting to impure white with change of standpoint. Legs light brownish-grey shifting to blackish, and adorned with impure white scale-markings, viz. :- a small spot or narrow edging externally at the tibio-tarsal joining; a narrow apical annulation on the first tarsal joint (metatarsus); the 2nd joint wholly whitish; the last 3 joints black-scaled, more or less tinged with dull testaceous in certain aspects, and from other standpoints glossed throughout with whitish. Wing 2 mm. long.

Loc. Seychelles. Mahé: from near Morne Blanc, about 800 feet, 2 ♀. Félicité: XII. 1908, 1 ♀. ♂ unknown. Prep., Eaton, no. 49 a, wing denuded.

Notiocharis, gen. nov. (Pl. 26, fig. 5 a-f).

Wings ovate-lanceolate, subacute apically between R^4 and R^5 ; cross-veins obsolescent; anterior basal cell vaguely indicated, about $\frac{1}{6}$ th of the wing's length; pedicel of the sectorial fork nearly twice the length of the part of the stem between the sectors R^4 and R^5 ; cubital fork shortly petiolate; vein A short, and nearly straight.

Antennæ in 3 (if not defective) 12-jointed; 1st joint elongate, somewhat triquetrous, on one side protuberant and scale-clad at the tip, longer than the third; 2nd joint ovoid, ample, shorter than the next, squamate; 3rd joint, subcylindrical, slender, equal in length to the 4th and 5th joints combined, and beset with crowded verticels of long curved spreading hair nearly throughout; the succeeding joints ovoid-fusiform with long subverticelate curved hairs spreading much in the same fashion as in *Panimerus* or *Clytocerus*; 12th joint Indian-club-shaped, approximated to the eleventh.

Genitalia imperfectly explored; inferior 3 appendages subequal in length to their basis; tenacular setæ wiry and numerous; the longest nearly as long as the limbs.

3. Notiocharis insignis, sp. nov. (Pl. 26, fig. 5 a—f).

Wings with conspicuous hair-markings, in part black, blackish grey, light yellow and in part white; viz.:—a narrow basal band at the roots, impure whitish; a broad band extending from near the fold of deflection outwards to the end of R^1 on the costa and to that of Cu^1 on the inner margin, subtransverse basally, oblique apically, and widest posteriorly, occupying the greater part of the disk, and enclosing 3 small but conspicuous snow-white spots formed of depresso-convex scales lying lengthwise clear of the fringe, and placed at the wing-margin outside the ends of vein A and of the two cubital



veins on a darkened ground, black or blackish. The exterior edge of this dark band anteriorly defines the outer limits of 6 of the usual 8 series of dark horrescent hair; its posterior fringe, talcose-glossed, is reinforced by linear black scales about $\frac{1}{2}$ the length of the long hairs of the fringe; and in the disk, anterior to the 1st cubital vein, the dark tint is somewhat lightened by an admixture of whitish hairs on the veins, so that from some standpoints the colouring appears to be light blackish grey. From the costa to R^{5} , or just beyond, the dark band is skirted by a narrow abbreviated stripe of spreading white hair, widened in the costal fringe. Apical remainder of the wing-veins clad with old gold or golden brown hair, glossed with gold, and with a few black hairs at the nearer parts of the radial sectors, and some of a dark colour that enter the costal fringe in the neighbourhood of R^{2} and of R^{4} . Wing-fringe matching in colour the adjacent part of the disk, but liable to shift from glossy yellowish to whitish, with a talcose gloss.

Head and thorax light yellowish-testaceous, with pale flaxen pubescence; a cluster of minute narrow black scales on the meso-pleuron, and some on the prominent veins beneath the wings at the roots. Abdomen blackish brown, with somewhat harsh and partly erect dorsal hair,—part inclined over appressed elongate scales inserted towards the bases of segments. Genitalia and their hair in 3 dull light-hempen brown. Antennæ concolorous with the head; when shifted about, some of the scales at the tip of the basal joint become blackish, and the flagellum towards the extremity, like the palpi, assumes a greyish or light brownish-grey tint. Legs glossy cream-coloured; broadly fuscescent-grey; at the tip of the tibia, and narrowly at the apex of the 1st tarsal joint on the exposed side in the hinder legs; and with the terminal joint black or black-brown. The long spreading hair-like tibial bristles, and some hairs on some of the tarsal joints shift with change of posture from flaxen to brownish and black. Wing 1.75 to 2 mm. long.

Loc. Seychelles. Mahé: near Morne Blanc, about 800 feet, 1 3. Mare aux Cochons district, about 1500 feet, I.—II. 1909, 5 3, 2 \cdop . Prep., Eaton, no. 61 \alpha, b.

The specimens from the Mare aux Cochons district were caught (2. II. 1909) in a swampy place shaded by *Eugenia*-trees and great *Pandanus Hornei*, near a mountain-stream. They were flying near partly dried up pools among dead *Pandanus-leaves* (Scott).

PSYCHODA Latr. (1796), et auct.; restricted Eaton (1904).

Type Psychoda alternata Say. Out of 9 or 10 species sub manû, 3 have been described:—Psychoda phalænoides Latr., P. alternata Say, and P. albipennis Zett.—Distribution: Tropical and Temperate regions: 2 occur in the Seychelles.

4. Psychoda alternata, Say (1824).

Psychoda sexpunctata, Curtis (1839).

Loc. Seychelles. Mahé: Cascade Estate, about 800 feet, 11 examples (pinned). Prep., Eaton, no. 70.

A species widely dispersed: N. America, Europe, Africa N. and S., India, New Guinea and Australia.

5. *Psychoda solitaria*, sp. nov. ? (Pl. **26**, fig. 6 *a*—*d*).

This is one of some doubtful species related closely to Psychoda albipennis Zett. in colour and structure (if indeed distinct) having ovate wings pointed at the end of R^5 , an ill-defined anterior basal cell, the sectorial fork sometimes incomplete, the 1st joint in the antenna shorter than the next two combined, the 3rd joint equal in length to the 4th and like most of the joints in the flagellum lageniform with a rounded or napiform base and a subfiliform neck. Gonopods geniculate; protopodite subequal in length to the exopodite.

In *Psychoda albipennis* (Pl. **26**, fig. 7 *a*—*d*), joint no. 13 in the antenna is followed by two diminutive rudimentary joints; no. 14 visible only under a high power, is colourless, narrow and small; no. 15, sub-globular or ovoid and dark. Length of wing 0.9 to 1.8 mm.

Loc. Europe from Scandinavia to the Basses Pyrénées. Prep., Eaton, no. 76.

Psychoda solitaria (Pl. 26, fig. 6 a—d) appears to differ in having joint no. 14 of the antenna also sessile but terminal, and subglobular with an apiculus. The question of identification arises in connection with the possibility of this appearance being misleading. Length of wing 1.15 mm.

Loc. Seychelles. Mahé: Cascade Estate, about 800 feet, 33 specimens (carded). Prep., Eaton, no. 76 A.

Philosepedon, Eaton (1904).

Differs from Psychoda in having no bristling hair on R^1 ; obtuse external \mathfrak{P} genitalia, and the ovipositor being not rostrate. Appendages of \mathfrak{F} inferior genitalia few tenaculate.

6. Philosepedon humeralis (Hoffmann); Meig.

A single \$\phi\$ fly agrees with the European insect.

Loc. Seychelles. Mahé: Cascade Estate, about 800 feet.

7. Philosepedon triungulatus, sp. nov.

Four flies, carded similarly to the preceding, and obtained at the same locality, differ from it in being darker in the wing-membrane (the hair is largely destroyed); and the 3 apparently has 3-tenaculate (not 2-tenaculate) inferior genital appendages; the tenaculae equal and divergent, otherwise similar to the corresponding parts in *Philosepedon humeralis*, so far as can be seen.

Loc. Seychelles. Mahé: Cascade Estate, about 800 feet.

Telmatoscopus, Eaton (1904).

As constituted hitherto, there are 14 species sub manû ranked in this genus, 12 of which have been described; but of some only one of the sexes is known. The terminal joint in the 3 16-jointed antenna is not relatively diminutive in comparison with its predecessors, and the 3rd joint equals the 4th in length. Wings ovate-lanceolate; pedicel of the sectorial fork inserted in or at the anterior basal cell. Tenacular spinules of the inferior genital appendages of 3 numerous.

A few species have wings apically acute exactly at the end of R° ; the insertion of the pedicel of the sectorial fork in the basal cell quite as far from the cross-vein R to M as the cell's apical width; and 1st joint in the antenna of the 3 shorter than the combined lengths of the 2nd and 3rd joints. T. advena rothschildii and meridionalis, Eaton (cf. Ent. M. Mag., January 1912). Preps. Eaton, nos. 94—96.

The remaining species have the wing's apex sub-acute or acute between the veins R^4 and R^5 , or it is divided asymmetrically by R^5 , the costal portion exceeding the lower. They can be roughly assorted thus:—

Axil of the sectorial fork nearer than that of the median fork to the base of the wing. *T. fraterculus* and *labeculosus*, Eaton. Preps. nos. 84 and 85.

Axils referred to equidistant from the base of the wing. T. ustulatus, Hal. MS., Walker (1859), morulus and ambiguus, Eaton. Preps. nos. 86—88.

Axil of the sectorial fork nearer than that of the median fork to the wing's apex. T. soleatus, Halid., Walk., decipiens and consors, Eaton. Preps. 91—93 and 3 species sub manû not named, including the one obtained at the island of Aldabra.

8. Telmatoscopus fryeri, sp. nov.

 \mathcal{P} (dried).—Wings of a somewhat light sepia-grey, with fringes to match, glossed with impure creamy-whitish at the apex from about the end of R^4 to that of M^4 , and with black-hair markings on the disk, viz.:—4 small spots standing in an almost straight, slightly oblique line with one another at the ends of ranks of bristling hair, and a 5th at the end of the subcosta; of these the outermost (at the axil of the sectorial fork) stands very little farther from the wing-roots than the three others: and besides these, at the ends of the veins are small blackish spots of appressed spreading hair that do not contribute to the fringe; wing-margin outlined in black. Legs and nearly all of the left antenna deficient. Ovipositor pitch-brown. Length of wing 2 mm.

Loc. Aldabra, 1908—9 (Fryer): a single defective specimen was brought back by the Seychelles Expedition.

The seventh genus represented in the collection belongs to a different group, the Group of Trichomyia and Sycorax, which is outlined below.

Basal cells cuneate at the base; the anterior bounded in front for nearly half its length by the primary trunk of the radius R^1 , and then deeply recessed,—a cross-vein linking to the trunk the common stem of the sectors and blending with the stem; R^4 suppressed. Wings obovate, rounded apically and widely at the end of R^5 . Antennæ 15-jointed; 3rd joint longer than the scape or than the 4th joint; joints of the flagellum mostly filiform or pastiniform. Palpi short; the last joint firm.

This group contains 3 genera, one of which is represented in the Seychelles collection: they are as follows:

- a. Anal vein long (3 long veins follow the median fork):
- (i) Eutonisca, Mennier (1905), from Baltic amber; sectorial fork sessile upon the anterior basal cell.
 - (ii) Trichomyia, Halid., Curtis (1839), Walker (1856); sectorial fork stalked,

proboscis short, palpi shorter than the head. Type, T. urbica, Europe, the only species.

aa. Anal vein obsolete or reduced to an abbreviated rudiment that is not continued to the wing-margin (2 long veins follow the median fork).

(iii) Sycorax (see below).

Sycorax, Haliday; Curtis (1839); figured by Westwood in Walker, Ins. Brit. Dipt. (1856).

Sectorial fork stalked; proboscis short; palpi shorter than the head. Type, Sycorax silacea Halid., described: and 2 other species from Germany and Algeria, in addition to one below from the Seychelles, undescribed, sub manu. Prep., Eaton, nos. 98—100. Name misapplied in America.

9. Sycorax, sp.

Two carded specimens, too defective for description.

Loc. Seychelles. Mahé: Cascade Estate, about 800 feet.

EXPLANATION OF PLATE 26.

- Fig. 1. Ulomyia fuliginosa Meig., \mathfrak{P} (Europe). Wing-neuration, for reference: A, analyvein; Bc, basal cells, the anterior (Bc^1) separated from the posterior (Bc^2) by the median vein; C, costa or anterior margin of wing; Cu, cubital veins, Cu^1 anterior or upper branch, Cu^2 posterior branch; M^1 and M^2 , branches of the median vein enclosing the median fork; R^1 , radius, and R^2 to R^5 its branches the radial sectors, of which R^2 and R^3 enclose the sectorial fork; Sc, subcosta. Cross-veins are cited by quoting the lettering of the veins they link together: e.g. the cross-vein Sc to R^1 . Opposite this cross-vein a plait or fold in the wing-membrane, shown by a dotted line, often causes difficulty in ascertaining precisely the place of insertion in R^4 of the pedicel of the sectorial fork, without first denuding the wing thereabouts: and cross-veins are sometimes hardly visible, \times 38.
- Fig. 2. Brunettia indica, sp. nov., ♂: a, wing (denuded), × 50; b, antenna (denuded), × 110; c, halter;
 d, superior genital appendage, viewed laterally; e, inferior genital appendages, × 110.
- Fig. 3. Brunettia indica, sp. nov., \mathfrak{P} : a, antenna (denuded), $\times 110$; b, palpi; c, anterior, and d, posterior leg, $\times 45$; e, ovipositor; f, sub-genital plate, $\times 100$.
- Fig. 4. Panimerus scotti, gen. et sp. nov., \mathfrak{P} : wing, denuded but with the positions of the dark hair spots indicated, × 33.
- Fig. 5. Notiocharis insignis, gen. et sp. nov., \mathcal{J} : a, wing (denuded), \times 45; b, antenna; c, anterior, and d, posterior leg (denuded), \times 45; e, inferior genital appendage; f, tenacular spines of inferior genital appendage under pressure.
- Fig. 6. Psychoda solitaria, sp. nov.?, d: a, antennal joints 1—4; b, antennal joints 11—14; c, gonopod; d, inferior genital appendage, × 110.
- Fig. 7. Psychoda albipennis Zett., 3, for comparison with Psychoda solitaria; a, antennal joints 1—4; b, antennal joints 11—15; c, gonopods and penis; d, inferior genital appendage, × 110.